

# 65W Medical Adapter

## FSP065M Series

### FEATURES

- Compact size 129 × 59 × 32 mm
- Certified medical safety IEC 60601-1
- Meet Energy Efficiency DOE Level VI
- No load power consumption  $\leq 0.21W$
- High altitude 5000M operation
- Meet EN55011 and FCC Class B
- Over voltage protection
- Over current protection
- Over temperature protection
- Compliant with RoHS requirement



### SAFETY STANDARD APPROVAL



### DESCRIPTION

The FSP065M series are high efficiency desktop adapter with IEC 320/C14 AC inlet, which can deliver 65 watts continuous output power. All models meet EN55011 and FCC class B emission limits, and are designed for medical applications.

### INPUT SPECIFICATIONS

Input voltage:	90-264 VAC
Input frequency:	47-63 Hz
Input current:	< 1.8 A (rms) / 115 VAC < 0.9 A (rms) / 230 VAC
Touch current:	< 100 $\mu$ A / 264 VAC, 63 Hz

### OUTPUT SPECIFICATIONS

Output voltage/current:	See rating chart
Maximum output power:	65W
Protection:	
Over voltage:	The power supply will shut down while over-voltage happened.
Short circuit:	Output can be short-circuited without damage, and will recover automatically after short-circuit condition is removed.
Over current:	Output current shall be limited between 200% max load and auto recovery or latch protection.
Over temperature:	The power supply will shut down while over-temperature happened. It will shutdown operation after the fault condition is removed.

### ENVIRONMENTAL SPECIFICATIONS

Operating temperature:	0°C~+40°C
Storage temperature:	-20°C~+85°C
Operating humidity:	5% to 95% RH non-condensing
Storage humidity:	5% to 95% RH non-condensing

### GENERAL SPECIFICATIONS

Efficiency:	See rating chart
Hold-up time:	8 ms minimum at 115Vac/60Hz
Line regulation:	$\pm 1\%$ maximum at full load
Inrush current:	50 A @ 115 VAC or 100 A @ 230 VAC, at 25°C cold start
Operating altitude :	5000 meters
Withstand voltage:	4000 VAC from input to output (2 MOPP)
MTBF:	150,000 hours at full load at 25°C ambient , calculated per MIL-HDBK-217F
EMC Performance (IEC60601-1-2)	
EN55011:	Class B conducted, class B radiated
FCC:	Class B conducted, class B radiated
VCCI:	Class B conducted, class B radiated
EN61000-3-2:	Harmonic distortion, Class A
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, $\pm 15$ KV air and $\pm 8$ KV contact
EN61000-4-3:	Radiated immunity, 3 V/m
EN61000-4-4:	Fast transient/burst, $\pm 2$ KV
EN61000-4-5:	Surge, $\pm 1$ KV diff., $\pm 2$ KV com.
EN61000-4-6:	Conducted immunity, 3 Vrms
EN61000-4-8:	Magnetic field immunity, 3 A/m
EN61000-4-11:	Voltage dip immunity, 30% reduction for 500 ms, 60% reduction for 100 ms, and >95% reduction for 10 ms

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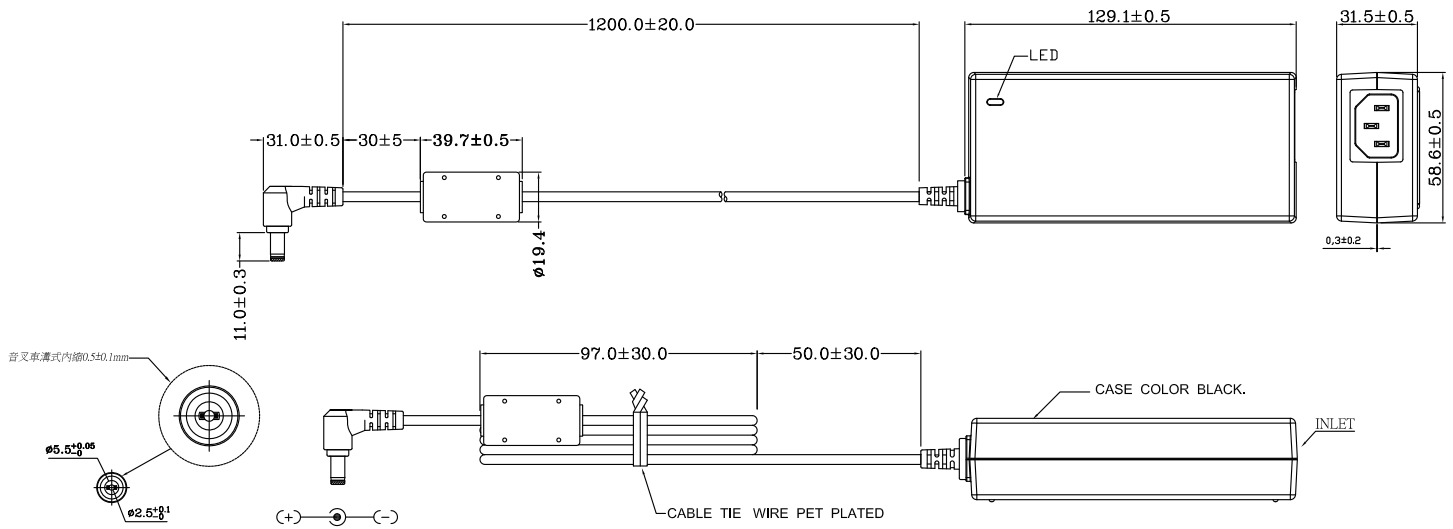
### OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Output						Average Active Efficiency (typical) @ 115 / 230 VAC
	Voltage	Min. Current	Max. Current	Tolerance	Ripple & Noise <sup>(1)</sup>	Max. Power	
FSP065M-DHA	12 V	0 A	5.42 A	±5%	120 mV	65W	88% / 88%
FSP065M-DGA	15 V	0 A	4.33 A	±5%	150 mV	65W	88% / 88%
FSP065M-DBA	19 V	0 A	3.43 A	±5%	190 mV	65W	88% / 88%
FSP065M-DCA	20 V	0 A	3.25 A	±5%	200 mV	65W	88% / 88%
FSP065M-DAA	24 V	0 A	2.71 A	±5%	240 mV	65W	88% / 88%

NOTES:

1. Ripple and noise measurements shall be made with an oscilloscope of at least 20MHz bandwidth. Output shall be bypassed at the connector with a 0.1µF ceramic disk capacitor and a 10µF electrolytic capacitor to simulate system loading.

### MECHANICAL SPECIFICATIONS



NOTES:

1. Dimensions shown in mm.